

that industry, and of this "alcohol" methyl alcohol is the most important variety. Large classes of the coal-tar colours—alizarin, indigo, and by far the greater number of the azo dyes—require no spirit at all in their manufacture either directly or indirectly, and these represent the larger proportion of all the colours produced. It is perfectly certain that for at least 75 per cent. of the whole output of coal-tar dyes alcohol does not enter into account even now, and therefore whatever causes may have hindered the prosecution of the industry in this country, the question of "alcohol" is not one of them.

Although it has destroyed some illusions, corrected many misstatements, and, as in this example of the coal-tar colour industry, set many matters in their true perspective, the report is eminently constructive in character. To what extent the representations of manufacturers have actually aided the committee in formulating their main suggestions remains to be seen, as the evidence has not yet been published.

These recommendations are as follows:—

(1) That an allowance be granted to all industrial spirit, whether of British or foreign origin, at the rate from time to time prevailing for the allowance to British plain spirits on exportation.

(2) That imported methylic alcohol be relieved from the obligation to pay the surtax imposed by the proviso to Section 8 of the Finance Act, 1902, and that methylic alcohol be accorded favourable treatment in the matter of denaturing.

(3) That "ordinary," i.e. unmineralised, methylated spirit should contain only 5 per cent. of wood-naphtha instead of 10 per cent. as now.

(4) That no charge should be made on manufacturers for the regular attendance of Excise officers to supervise denaturing operations or the use of denatured spirit, in factories taking the benefit of Section 8 of the Finance Act, 1902.

(5) That where spirit is allowed to be denatured with special agents, such agents should be subject to official test and approved, and that accounts should be kept by the user showing receipts of spirit into store, the issues thereof from store in detail, and the quantities of the goods produced.

(6) That in the manufacture of fine chemicals and pharmaceutical products, spirit specially denatured should be allowed only where the manufacture is kept entirely separate from the manufacture of tinctures and other preparations in which spirit remains as spirit in the finished product.

(7) That the regulations governing the sale by retail of "mineralised" methylated spirit should be made less stringent and more elastic.

The committee are of opinion that any special cases not touched by the above recommendations can always be met under the powers conferred by Section 8 of the Act of 1902. This Act provides adequate and entirely satisfactory machinery for securing that the spirit may be used in a condition that is suitable and appropriate to each particular purpose of manufacture. The machinery is elastic—much more so than is the corresponding machinery in Germany—and it permits of every reasonable process of denaturing, or even in the last resort of the use of spirit in a pure state. For more than this it would be impossible to ask.

The committee believe that their recommendations, if adopted, will place the manufacturers of this country in respect of the use of alcohol in industry on a footing of equality, in some respects of advantage, as compared with their competitors abroad. Amongst the witnesses who appeared before them they found a very general impression that in Germany, at any rate—and Germany is always alleged to be our most

formidable competitor—spirit could be used in manufacture duty-free and pure with scarcely any restraint. This, too, is one of the illusions which the inquiry may serve to dispel. As an actual fact, in practically all cases, with the exception of that of smokeless powder, in Germany duty-paid spirit must be used unless the spirit be subjected to some authorised process of denaturing prior to use. As regards price, and that is the principal factor, the committee think that the grant of the export allowance would make the average price of industrial spirit in the United Kingdom even lower than the average price in Germany. The price here, exclusive of the cost of any denaturing, and this denaturing may be what is called *ad hoc*—that is, dependent upon the use of something which is necessary to the manufacture—would be about 7d. the *proof* gallon, or about 11½d. the bulk gallon at 64 over proof—the strength common in industrial spirit. That is as low as the minimum price paid by users in Germany in 1902, when spirit was abnormally cheap, and is much below the figures of 15½d. per proof gallon, or 25½d. per bulk gallon, prevailing in Germany at the present time. Further, it is important to remember that the price of spirit in this country, where all materials may be freely used, and where none of general use is subject to taxation, is a stable price. In Germany the conditions of production are largely artificial and of very doubtful economic soundness, and they tend to wide and rapid fluctuations in price.

The main report is supplemented by a valuable report by the chairman, Sir Henry Primrose, and Dr. Thorpe, the principal of the Government Laboratories, on the working of the spirit regulations in Germany, based upon personal inquiry and observation in that country. So much stress was laid by certain witnesses upon the system and regulations established in Germany in connection with the industrial use of alcohol that it was thought very desirable to procure information at first hand upon that subject. This report may, it is hoped, serve to correct much misapprehension which appears to exist upon the benefits of State-aided alcohol in Germany. There is ample proof that the German user of spirit is not greatly benefited by the policy which the agrarian party has succeeded in fixing upon him, and is, indeed, at times greatly injured by it.

In reply to a question asked in the House of Commons on Tuesday, the Chancellor of the Exchequer announced that he has decided to deal with the subject of the committee's report in an omnibus Bill which he will introduce to the House, and not in the Budget and Finance Bill as originally proposed.

THE CAPITAL OF TIBET.¹

ALL who have read in the columns of the *Times* about the mission to Lhasa will welcome in a more concrete form the story as re-told by Mr. Landon in the two handsome volumes now given to the public. In an expedition carried out under such conditions as those which governed Colonel Younghusband's mission, the special correspondent becomes a distinct factor in its success. The working men of the party, even if they have eyes to see and the rare gift of recording their impressions faithfully, can but present such generalisations as may be gathered during the few intervals hastily snatched from the worries and anxieties incidental to the routine of an abnormal state of existence. Usually they see but little, and that little from the restricted standpoint of their own idiosyncrasies.

¹ "Lhasa; an Account of the Country and People of Central Tibet, &c." By Percival Landon. Vol. i. Pp. xix+414. Vol. ii. Pp. xi+426. (London: Hurst and Blackett, 1905.) Price 42s. net.

There is no lack of literature dealing with Tibet, literature dating from the early Jesuit and Capuchin friars of the seventeenth and eighteenth centuries to the latter-day expeditions of the native explorers of the Indian Survey, to whose marvellous performances in the field Mr. Landon is about the first writer to do passing justice; but we have never yet had an intelligent and accurate representation of the social existence of the people, nor a careful exposition of the weird eccentricities of that extraordinary anachronism, the Government of Tibet, at all comparable to that which Mr. Landon now gives us. Nor is this all. The enthusiasm of the true explorer pervades the book; that nameless joy in treading new and untouched fields; that absorbing interest in the aspects of nature, in its lights and shadows, fields and flowers, outline and colour; aspects which enchain the imagination everywhere, but acquire fresher value

the Himalayas can fill up the pictures with the grace of nature's colouring from Mr. Landon's description alone, although here and there his colour notes are perhaps a little indefinite. What, for instance, are "lightning greys"? But where colour reproduction has not been left to the reader's imagination, and has been attempted by some process of block printing, the results are not so satisfactory. The distances are hard and obtrusive, and atmosphere has vanished from the view. Even in Tibetan highlands there is a certain amount of atmospheric influence, however thin it may be, which affects one's appreciation of distance.

To the great majority of readers Mr. Landon's descriptions of the beauty of the Brahmaputra valley to the south of Lhasa, of the glory of Tibetan sunsets, of the splendour of the Turquoise Lake set in the midst of the flower-strewn plain, of the vast impressiveness



FIG. 1.—Part of the Potala Palace from the buildings at its base. It is built of granite and whitewashed once a year. The dark central portion is crimson. From Landon's "Lhasa."

and larger interest the farther they are removed from the area of the well trodden world. Certainly there must be many more beautiful landscapes than those of the southern valleys of Tibet, the beauty of which exists, so to speak, in scraps—large scraps, perhaps, but scraps that are separated by wide intervening spaces of stony desolation and dreary outlook. Yet many of the best pages of the book are full to the brim with vivid descriptions of the beauty of Tibetan scenery as Mr. Landon saw it in the basin of the Brahmaputra River.

The illustrations are excellent, and there is an added value to them in the notes which are appended indicating the general tones and local colour of each view. If Mr. Landon has invented this method of recording the principal charm of Tibetan scenery for the benefit of those who know not Tibet, he is much to be congratulated thereon. All who know and love

of the isolated city of mystery itself as it bursts on the view from a mountain-ringed depression beyond the Potala—the guardian sanctuary of its western gates—all these things will be just as new and as surprising as are the kindly amiability of its half barbarous people and the friendliness of disposition which they evinced towards the foreigner. Not that Mr. Landon is unduly optimistic. The extraordinary contrasts between barbarous magnificence and indescribable filth and squalor are not missed. Where the sweet scent and brightness of English flowers is noted as a passing incident there is no lack of intimation as to the nature of the rotting filth from which they spring. The interior of temples and dwelling houses, described as often impressive in its magnificence, and always surprising in the character of its artistic decoration, involves an approach through knee-deep slush and mud, terminating in the ascent of a greasy stairway

foul with the accumulation of rancid butter and poisonous forms of putrid filth.

Animate nature in Tibet is no better than inanimate. We will pass by the pigs and the dogs, and refer only to the people. It was discovered by the medical staff of the mission who attended to the wounded warriors of Guru that the natural complexion of the Tibetan was quite fair—as fair as that of any European, in spite of the fact that no soap is ever used. But to judge from the aspect of the Tibetan as he (or she) appears in the ordinary unclean garb of daily life, the general tint of the skin appears to be that of a well baked potato picked out from amongst the charred sticks of a burn-out bonfire. The children are pretty and remarkably affable, and the general unloveliness of their parents is due quite as much to dirt as to exposure to the rigorous climate.

The story of the advance of the mission through

Not the least interesting chapters of Mr. Landon's book are those which deal with the superficial aspects of lamaism, and the relation between the Tibetan hierarchy and our frontier politics. Tibet affords a notable example (if one were needed) of the degrading, stifling, destroying effects of a dominant priesthood on a country's developments. Between the lamaism of Tibet and the pure faith of early Buddhism there is indeed a great gulf fixed, and Mr. Landon is well within the mark when he describes modern lamaism as "sheer animistic devil worship." Yet he is quite ready to recognise the power and the strength which are gained by the lofty isolation—the stern aloofness of the head of the Tibetan Church; and he is probably correct in estimating the Dalai lama as being still the recognised head of the Tibetan Church and State wherever he may be, at Urga or at Lhasa. Nor does he fail to reckon up the im-

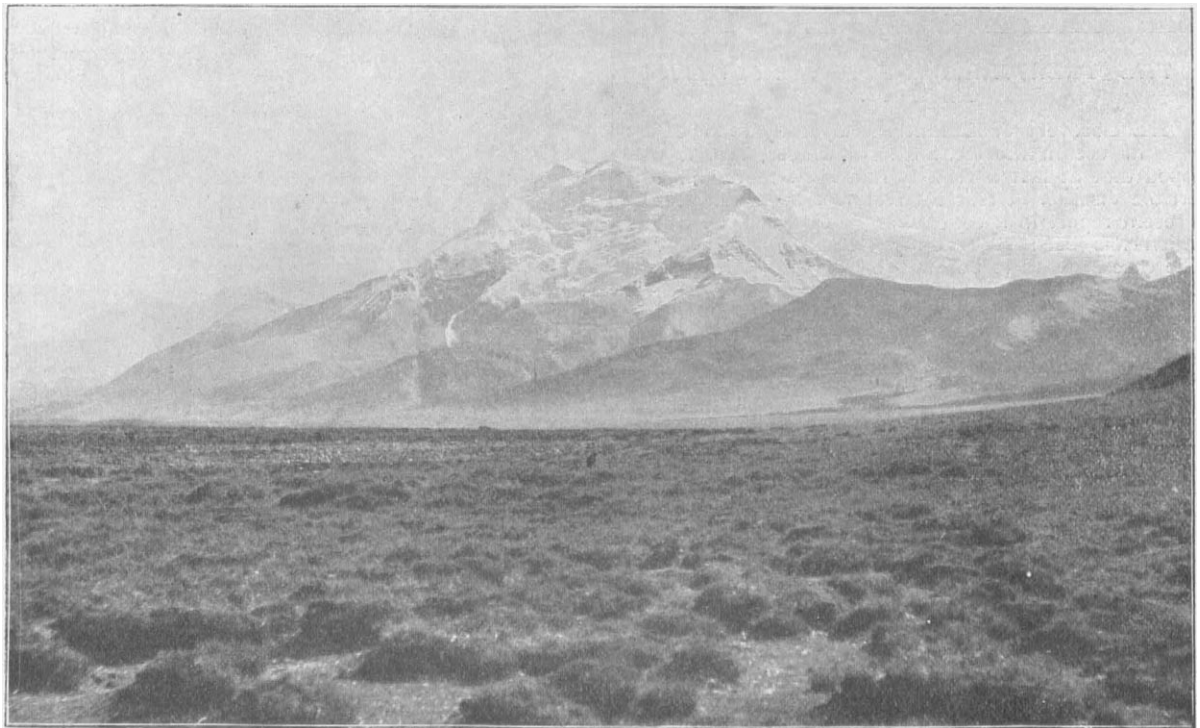


FIG. 2.—Nichi-kang-sang (24,000 feet). This peak guards the road to Lhasa over the Karo la. The track passes suddenly through the mountain barrier between the darker hill and the icefields of Nichi-kang-sang. From Landon's "Lhasa."

the tangled forests and over the bleak passes of Sikkim is well told. There is none of the reiteration of the guide book or of the monotony of the intelligence report in Mr. Landon's tale. He takes the reader with him through the narrow and slippery ways of Chumbi, over the Himalayan backbone (not so formidable as the Sikkim-Chumbi passes), down the gentle slope to Gyantse, with an ever-varied interest gathered from what is to be seen around him as he rides. Mountains and stone-strewn slopes, trees (where there are any), flowers, and the small things that become great in a land where vegetation barely exists, all are noted in their turn, whilst we happily miss the daily routine of military movement and the everlasting repetition of marching experiences. Only when we get to the fighting stage do we hear much about the little army which formed the escort; and then there is enough of incident to make a fascinating and lasting record of really great achievement.

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pressive effect of certain ceremonials, and the really awe-inspiring aspects of the temple interiors hallowed by the ever-dominating figures of the great "Master." Here we cannot quite follow him, for if his sketch of the head of the Great "Jo" in the holy of holies at Lhasa is realistic, the original can hardly be impressive.

It will be news to most people that our Queen Victoria of blessed memory was, and is, a Tibetan incarnation, and is represented by a bloodthirsty blue goddess who revels in horrors such as would astonish even the gifted Kali of the Hindus. Yet she is regarded rather as a beneficent and protective goddess than a malignant one. This is encouraging, for it shows that something at least of the world-wide veneration that surrounded our ever-loved Queen had filtered through the almost impenetrable armour of lamaistic isolation. The Tsar has only recently been canonised, so to speak, on Dorjeff's recommendation.

As a recent incarnation, or "last-joined" saint, he invested the Dalai lama with a complete suit of bishop's canonicals. Perhaps this recognition of a certain analogy between the two Governments is not quite so inappropriate as it at first appears.

Mr. Landon concludes his delightful book with an expression of his opinion that the doors of Lhasa are once again closed to the European. Not again (according to our author) for many a long year will any Englishman watch for the flashing cupolas of the Potala from the banks of the Kyi Chu, or penetrate into the inner sanctuary of the everlasting Jo. With this view of the future of Tibet we can hardly agree. By his own showing there is quite enough of uncertainty, even in the present political situation, to warrant the making of a straight road over the Himalayan passes with as little delay as possible; and it should not be forgotten that the right of way to Gyantse is already secured. T. H. H.

THE TREATMENT OF CANCER WITH RADIUM.

THE discovery of radium was speedily followed by its use in the treatment of cancer, and it was hoped that at last a remedy had been found for this terrible disease. Great interest has been aroused by a recent report in a contemporary of a case of cancer which has been successfully treated by this agent. The case appears to be undoubtedly one of cancer, as the patient was carefully examined before, during, and after treatment by competent authorities; but the report of cure must be accepted with caution. We are informed that the treatment began in March, 1904, and although the disease has now disappeared, it is still possible that it may recur.

A very large number of cases of cancer have been treated by radium in this country, on the Continent, and in America. Some have improved remarkably, but in most instances there has been no apparent benefit, and in no case has sufficient time elapsed to speak with certainty of cure. No surgeon would feel justified in reporting a cure of cancer until at least two years had passed without recurrence, and there are many instances on record where a longer period of apparent immunity has been followed by a re-appearance of the disease.

It must be remembered that the effect of radium upon a cancerous growth is, so far as we are at present aware, purely local. The terrible feature of cancer is the early involvement of the lymphatic glands, followed by the formation of secondary tumours in the internal organs. It is impossible to follow these internal developments by such a remedy as radium. Only too often a patient is found, on first seeking medical advice, to have already these secondary deposits, and treatment by local measures is purely palliative. That relief may be afforded in some cases which are beyond operation is recognised, but nothing has yet been reported which will warrant a surgeon using radium in a case of cancer where there is a possibility of complete removal by the knife.

Radium is applied in small tubes to the surface of a tumour, and in some cases it has been found possible to place it in the interior of a growth through a small incision. The quantities available are so minute that only a small area can be treated at one time. In the case of cancer mentioned above, the quantity which was used was ten milligrams. Fortunately the radium can be used again and again, for its energy appears practically to be inexhaustible.

NOTES.

SINCE the appearance in NATURE of April 6 of an article on the proposed amalgamation of the Society of Arts and the London Institution, a meeting of the proprietors of the London Institution has been held to consider the managers' proposals in connection with the amalgamation. The proposals met with a determined opposition from some proprietors; and after a somewhat noisy and undignified discussion, it was resolved to defer the further consideration of the scheme of amalgamation until after the annual meeting of the London Institution on April 28. The result of this meeting is to be regretted, since it implies the loss for the present of an excellent opportunity to accomplish the establishment of an important and powerful institute designed to develop a popular interest and regard for scientific work and results. It is to be hoped that it may prove possible to arrive at some agreement which will lead to the formation of a vigorous scientific organisation, in which the privileges offered by the Society of Arts and the London Institution will be combined.

THE Paris Geographical Society has awarded its gold medal to M. Paul Doumer.

It is intended, if found practicable, says the *Pioneer Mail*, to arrange for daily weather reports from the Andamans by wireless telegraphy.

THE death is announced of Prof. A. Piccini, professor of chemistry at the R. Istituto di Studi superiori, Florence, and author of several works on chemistry.

THE President of the Board of Agriculture and Fisheries has appointed a committee to inquire into the nature and causes of grouse disease, and to report whether any, and, if so, what, preventive or remedial measures can with advantage be taken with respect to it.

THE Paris correspondent of the *Times* announces the death of Colonel Renard, the director of the National Aërostatic Park at Meudon. The investigations and experiments of the Renard brothers have done much to promote the progress of aerial navigation.

It is announced that the Liège International Exhibition will be opened on Saturday, April 22, and that, unlike most exhibitions, the buildings will be complete. The exhibition will be of a very attractive and picturesque character, and the buildings cover a greater area than at any previous exhibition, except those of Paris in 1900 and of St. Louis. During the period of the exhibition several congresses will be held in Liège, that of mining and metallurgy, from June 26 to July 1, promising to be the most largely attended.

THE *Times* correspondent at Athens states that at the last meeting of the Archæological Congress, on April 13, it was decided that the present executive committee should continue to exist until the next meeting of the congress, which was fixed to take place at Cairo after a *minimum* interval of two years, the Egyptian Government having signified its willingness to accept this arrangement.

PRESS telegrams from Martinique report that Mont Pelée is again showing volcanic activity. On April 9-10 the escape of vapour was fairly abundant. On April 10-11 a marked recrudescence manifested itself; numerous small clouds issued from the vent, and there was a small flow of lava into the valley of the White River. On April 13-14 frequent rumblings were heard, and it was noticed that blocks of rock, accompanied by white clouds, were expelled from the south side of the crater.